



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,258	01/16/2004	Jeffrey M. Dils	10710/229 (PTG 1020 PUS)	6917
757	7590	09/06/2005	EXAMINER	
BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			ALIE, GHASSEM	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,258

Applicant(s)

DILS ET AL.

Examiner

Ghassem Alie

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-36 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-24, drawn to a power saw safety system including a protective barrier between the cutting blade and a user and a control system receiving a detecting signal outputted from a detection system, classified in class 83, subclass 75.5.
 - II. Claim 25, drawn to a method of minimizing the risk of injury to a user of a power saw including steps of providing a protective barrier between the cutting blade and the user and selectively providing a warning signal or stopping motion of the saw blade, classified in class 83, subclass 59.
 - III. Claim 26, drawn to a method of minimizing the risk of injury to user of a cutting tool including steps of detecting a close proximity between the user and a portion of the cutting tool not including blade and selectively providing a warning signal or stopping motion of the saw blade upon detecting the close proximity, classified in class 83, subclass 13.
 - IV. Claims 27-32, drawn to a machine for cutting a workpiece including a support structure having a cutting area, a cutting tool associated with the support structure and adapted to move partially into the cutting area to cut the worpoiece, and a control system, classified in class 83, subclass 162.
 - V. Claim 33, drawn to a machine for cutting a workpiece including a tool having a motor to drive a blade for cutting the workpiece and a detection system that includes a portion of the tool other than the blade adapted to function as a capacitive probe to search for a preselected capacitance level, classified in class 83, subclass 471.

Art Unit: 3724

VI. Claims 35 and 36, drawn to a method of detecting close proximity to a tool including steps of providing a capacitive probe on a portion of the tool other than the blade and sensing whether a user is in close proximity to the probe by detecting a capacitance of the user, and control system to receive signal from the capacitive probe indicative of the presence of a portion of a user's body, classified in class 83, subclass 49.

A. Inventions II and I are related as process and apparatus for its practice.

The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

(MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another and materially different apparatus that does not have a control system receiving the detecting signal outputted by a detection system coupled with the protective barrier.

B. Inventions II and IV are related as process and apparatus for its practice.

The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

(MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another and materially different apparatus that does not have a support structure having a cutting area and a cutting tool associated with the support structure and adapted to move partially into the cutting area to cut the worpoiece.

C. Inventions II and V are related as process and apparatus for its practice.

The inventions are distinct if it can be shown that either: (1) the process as claimed

can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

(MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another and materially different apparatus that does not have a detection system that includes a portion of the tool other than the blade adapted to function as a capacitive probe to search for a preselected capacitance level.

D. Inventions II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. The invention of Group II which includes steps of providing a protective barrier between the cutting blade and detecting a close proximity between the user and the protective barrier has a separate utility such as it could be used without the step of detecting a close proximity between the user and a portion of the cutting tool not including the cutting blade of the invention in Group III. Conversely, the invention of Group III which includes a step of detecting a close proximity between the user and a portion of the cutting tool not including the cutting blade has a separate utility such as it could be used without the steps of providing a protective barrier between the cutting blade and detecting a close proximity between the user and the protective barrier of the invention of Group II. See MPEP § 806.05(d).

E. Inventions II and VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. The invention of Group II which includes steps of providing a protective barrier between the cutting blade and detecting a close proximity between the user

Art Unit: 3724

and the protective barrier has a separate utility such as it could be used without the steps of providing a capacitive probe on a portion of the tool other than the blade and sensing whether a user is in close proximity to the probe by detecting a capacitance of the user of the invention in Group VI. Conversely, the invention of Group VI which includes steps of providing a capacitive probe on a portion of the tool other than the blade and sensing whether a user is in close proximity to the probe by detecting a capacitance of the user has a separate utility such as it could be used without the steps of providing a protective barrier between the cutting blade and detecting a close proximity between the user and the protective barrier of the invention of Group II. See MPEP § 806.05(d).

F. Inventions III and VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. The invention of Group III which includes step of selectively providing a warning signal or stopping motion of the saw blade upon detecting the close proximity between the user and a portion of the cutting tool has a separate utility such as it could be used without the steps of providing a capacitive probe on a portion of the tool other than the blade and sensing whether a user is in close proximity to the probe by detecting a capacitance of the user of the invention in Group VI. Conversely, the invention of Group VI which includes steps of providing a capacitive probe on a portion of the tool other than the blade and sensing whether a user is in close proximity to the probe by detecting a capacitance of the user has a separate utility such as it could be used without the step of selectively providing a warning signal or stopping motion of the saw blade upon detecting the close

Art Unit: 3724

proximity between the user and a portion of the cutting tool of the invention of Group III. See MPEP § 806.05(d).

G. Inventions III and I are related as process and apparatus for its practice.

The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

(MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another and materially different apparatus that does not have a control system receiving the detecting signal outputted by a detection system coupled with the protective barrier.

H. Inventions VI and I are related as process and apparatus for its practice.

The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

(MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another and materially different apparatus that does not have a protective barrier between the cutting blade and a user and a detecting system coupled to the protective barrier.

I. Inventions I and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. The invention of Group I which includes a protective barrier between the cutting blade and a user and a control system receiving a detecting signal outputted from a detection system has a separate utility such as it could be used without

Art Unit: 3724

the support structure having a cutting area, a cutting tool associated with the support structure and adapted to move partially into the cutting area to cut the workpiece of the invention in Group IV. Conversely, the invention of Group IV which includes a support structure having a cutting area, a cutting tool associated with the support structure and adapted to move partially into the cutting area to cut the workpiece has a separate utility such as it could be used without the protective barrier between the cutting blade and a user and a control system receiving a detecting signal outputted from a detection system of the invention of Group I. See MPEP § 806.05(d).

J. Inventions I and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. The invention of Group I which includes a protective barrier between the cutting blade and a user and a control system receiving a detecting signal outputted from a detection system has a separate utility such as it could be used without the detection system that includes a portion of the tool other than the blade adapted to function as a capacitive probe to search for a preselected capacitance level of the invention in Group V. Conversely, the invention of Group V which includes a detection system that includes a portion of the tool other than the blade adapted to function as a capacitive probe to search for a preselected capacitance level has a separate utility such as it could be used without the protective barrier between the cutting blade and a user and a control system receiving a detecting signal outputted from a detection system of the invention of Group I. See MPEP § 806.05(d).

K. Inventions III and IV are related as process and apparatus for its practice.

Art Unit: 3724

The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

(MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another and materially different apparatus that does not have a support structure having a cutting area, a cutting tool associated with the support structure and adapted to move partially into the cutting area to cut the workpiece, and a control system.

L. Inventions III and V are related as process and apparatus for its practice.

The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

(MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another and materially different apparatus that does not have a detection system that includes a portion of the tool other than the blade adapted to function as a capacitive probe to search for a preselected capacitance level.

M. Inventions VI and IV are related as process and apparatus for its practice.

The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

(MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another and materially different apparatus that does not have a support structure having a cutting area and a cutting tool associated with the support structure and adapted to move

partially into the cutting area to cut the worpoiece.

N. Inventions IV and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. The invention of Group IV which includes a support structure having a cutting area, a cutting tool associated with the support structure and adapted to move partially into the cutting area to cut the worpoiece has a separate utility such as it could be used without a detection system that includes a portion of the tool other than the blade adapted to function as a capacitive probe to search for a preselected capacitance level of the invention in Group V. Conversely, the invention of Group V which includes a detection system that includes a portion of the tool other than the blade adapted to function as a capacitive probe to search for a preselected capacitance level has a separate utility such as it could be used without the support structure having a cutting area, a cutting tool associated with the support structure and adapted to move partially into the cutting area to cut the worpoiece of the invention of Group VI. See MPEP § 806.05(d).

O. Inventions VI and V are related as process and apparatus for its practice.

The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

(MPEP § 806.05(e)). In this case (1) applies because the process as claimed can be practiced by another and materially different apparatus that does not have a detection system that includes a portion of the tool other than the blade adapted to function as a capacitive probe to search for a preselected capacitance level. The apparatus as claimed can be used to practice

Art Unit: 3724

another and materially different process that does require a step of sensing whether a user is in close proximity to the probe by detecting a capacitance of the user or providing a control system to receive a signal from the capacitance probe.

2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their divergent subject matter, restriction for examination purpose as indicated is proper.

3. Upon election of one of the inventions above, applicant is required to further elect a single species from each one the Groups A-C below.

4. This application contains claims directed to the following patentably distinct species of the claimed invention:

Applicant must elect one species from each one the Groups A-C below:

Group A:

Species I A. claim 2, a blade guard as a protective barrier.

Species II A. claim 3, a throat plate as a protective barrier.

Group B.

Species I B. claim 6, a digital capacitive circuit configured to sense a capacitance in the range from about 1 picofarad to about 500 picofarad.

Species II B. claim 7, a digital capacitive circuit configured to sense a capacitance in the range from about 50 picofarad to about 200 picofarad.

Art Unit: 3724

Species III B. claim 8, a digital capacitive circuit configured to sense a capacitance about 100 picofarad.

Group C.

Species I C. claim 11, the control system is adapted to stop motion of the cutting blade upon receiving the detecting signal.

Species II C. claim 12-13, the control system includes a braking resistor operative with the motor to stop motion of the cutting blade.

Species III C. claim 14, the control system includes an amplifier circuit to reverse current in the motor.

Species IV C. claim 15, the control system is adapted to disable a warning signal upon receiving the detecting signal.

Species V C. claim 16 and 17, the control system is adapted to provide a warning signal upon receiving the detecting signal and the warning signal is a light.

Species VI C. claim 16 and 18, the control system is adapted to provide a warning signal upon receiving the detecting signal and the warning signal is an audible sound.

Species VII C. claim 19, the control system is adapted to disconnect electrical power to the motor.

Species VIII C. claim 20, the control system is adapted to move the cutting blade away from a cutting area.

Species IX C. claim 21-23, the control system is selectively adapted to provide a warning signal to stop motion of the cutting blade or move the cutting blade away from a cutting area upon the detecting signal.

Species X C. claim 24, upon receiving the detecting signal the control system is selectively adapted at least two simultaneously actions selecting from the group consisting of providing a warning signal, stopping motion of the cutting blade, and moving the cutting blade away from a cutting area.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor or at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR. 1.143).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added

after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501.

The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-8300.

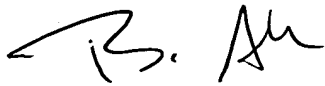
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (too-free).

Application/Control Number: 10/759,258
Art Unit: 3724

Page 14

GA/ga

September 1, 2005



BOYER D. ASHLEY
PRIMARY EXAMINER